Safety Data Sheet

GMA Garnet™

June 2025

Revision 21

SECTION 1 – IDENTIFICATION OF MATERIAL AND SUPPLIER

(a) GHS product identifier: **GMA Garnet™**

(b) Other means of identification:
Garnet sand, almandine garnet, alluvial garnet, PremiumBlast™, SpeedBlast™, NewSteel™, 30/60 mesh, ClassicCut 60, ClassicCut 80, ClassicCut 120, 600/250.

(c) Recommended use: Blast cleaning abrasive, water jet cutting abrasive, water filtration media.

(d) Supplier's details:

GMA Garnet Pty Ltd
122 Goulds Rd, Geraldton, Western Australia 6532

Telephone number:
+61 8 9923 6000 (Australia)
+1 832 243 9300 (United States)

E-mail: info.global@gmagarnet.com

(e) Emergency phone number:

+61 8 9923 6000; 24 hours: +61 428 218 356 or +61 407 422 031 (Australia)
+1 832 243 9300; 24 hours: +1 713 301 0354 (United States)

SECTION 2 - HAZARDS IDENTIFICATION

(a) Globally Harmonized System – GHS, classification of the substance: **2513.20.00**

(b) GHS label elements, including precautionary statements:

The product is dominantly garnet (almandine variety) which is a Non-Hazardous substance. Traces of dust in the unused product are from calcium carbonate which is also Non-Hazardous.

(c) Chemical Hazardous Bulletin – CHB, classification of the substance: **1342**

(d) Other hazards which do not result in classification:

The product does **not** contain asbestos.
Do not breathe dust liberated from used product. Product may have become contaminated by use.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

This material is a natural mixture of almandine garnet and other trace minerals.

Chemical Identity	Common Name	CAS Number	Proportion (weight %)
$Fe_3Al_2(SiO_4)_3$	Almandine Garnet	1302-62-1	Greater than 96%
$FeTiO_3$	Ilmenite	12168-52-4	Less than 3.5%
$CaCO_3$	Calcium Carbonate (free)	471-34-1	Less than 1.0%
$ZrSiO_4$	Zircon	14940-68-2	Less than 0.1%
SiO_2	Crystalline Silica (free)	14808-60-7	Less than 0.1%

SECTION 4 – FIRST AID MEASURES

No acute or chronic health effects known in workers arising from short or long term exposure to this product.

(a) Description of first aid measures:

Ingestion: Non-toxic. There are no known health effects resulting from accidental ingestion of small amounts that may occur during normal handling. Ingestion of larger amounts may cause abdominal discomfort due to abrasiveness. Seek medical attention if symptoms develop.

Eye contact: Particle and dust exposure may cause eye irritation due to abrasiveness. Flush with plenty of clean water for at least 15 minutes or until particles are removed. Seek medical attention if irritation or soreness persists.

Skin contact: There are no known health effects from skin contact that may occur during normal handling. Seek medical attention if symptoms develop. Contact with material under pressure will damage skin by abrasion.
Clean and dress any open wounds and seek medical attention.

Inhalation: Exposure to dust created by use as a blast cleaning media may cause throat and lung irritation, coughing or shortness of breath. Move to fresh air and blow nose to remove particulates from nasal passages. Seek medical attention if symptoms persist.

(b) Most important symptoms and effects, both acute and delayed:

- Ingestion: No specific symptoms noted.
- Eye contact: No specific symptoms noted.
- Skin contact: No specific symptoms noted.

- Inhalation: No specific symptoms noted.

(c) Indication of immediate medical attention and special treatment needed, if necessary:

- It is recommended that eyewash facilities are available in the workplace.

SECTION 5 – FIRE FIGHTING MEASURES

This product is non-flammable and does not support combustion.

a)	Extinguishing media:	Non-flammable. Use media suitable for the surrounding materials.
b)	Specific hazards arising from the chemical:	None known.
c)	Special protective equipment and precautions:	No specific procedures given. Use protective equipment and precautions suitable for surrounding fire.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

(a) Personal precautions, protective equipment and emergency procedures:
No special precautions necessary. Wear safety equipment as for normal handling.

(b) Environmental precautions:
No special precautions necessary. This material should not be dumped in nature but collected and disposed of in accordance with local, state or federal guidelines.

(c) Methods and materials for containment and cleaning up:
If possible, vacuum the material to avoid generating unnecessary dust, otherwise, sweep and shovel any spillages.

SECTION 7 – HANDLING AND STORAGE

(a) Precautions for safe handling:
No special precautions necessary.

(b) Conditions of safe storage, including any incompatibilities:
Storage areas should be ventilated and dust generation minimised when handling loose bulk product. Use good housekeeping practices to keep nuisance dust to a minimum.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

(a) Control parameters/Exposure Standards:

Crystalline silica (quartz) respirable dust: 0.05 mg/m^3 TWA (respirable dust is ≤ 7 microns particle equivalent aerodynamic diameter) may be exceeded when the product is used for dry blast cleaning, depending on material being blasted.
Total dust (inspirable): 10 mg/m^3 TWA (time weighted average) may be exceeded when the product is used for dry blast cleaning, depending on material being blasted.

(b) Appropriate engineering controls:

Maintain ventilation and/or dust collection to reduce exposure to dust generated during handling, use and clean-up. Maintain a clean and safe work environment and monitor effectiveness.

(c) Individual protection measures:

Follow local, state or federal guidelines for the use of personal protection equipment. Blast cleaning operations should use an air fed abrasive blast hood conforming to relevant standards such as Australian Standards 1715, 1716 and European Standard EN14594:2005 such as a Nova 2000, as well as leather (or equivalent) gloves and apron when in use. Hearing protection should be worn when blast cleaning.

During general handling of product, it is recommended to use safety glasses with side shields or goggles. If risk of inhaling dust is present wear, at minimum, a P1 personal respirator (disposable or cartridge type).

The effects from exposure to this product will depend on several factors including frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. It is recommended that users will assess the risks for their method of application and apply control methods where appropriate.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

(a)	Appearance	: Pink to red coloured free flowing sand.
(b)	Odour	: Odourless.
(c)	Odour threshold	: Not applicable.
(d)	pH	: 8.0 to 9.0
(e)	Melting point	: Approximately 1250˚C (2282˚F)
(f)	Flash point	: Non-combustible.
(g)	Evaporation rate	: Not applicable.
(h)	Flammability (solid, gas)	: Non-flammable.
(i)	Upper/lower flammability or explosive limits	: Non-combustible.
(j)	Vapour pressure	: Not applicable.
(k)	Vapour density	: Not applicable.
(l)	Specific gravity	: 4.1
(m)	Solubility	: Insoluble.
(n)	Radioactivity	: Not detectable above background levels.
(o)	Hardness	: 7.5 – 8.0 Mohs
(p)	Particle size	: Average range between 0.1 – 0.6mm (150 mesh – 30 mesh), depending on grade.
(q)	Particle shape	: Sub-angular.
(r)	Source	: Alluvial
(s)	Bulk density	: Approximately 2.3 t/m^3 (145 lbs/ft^3)
(t)	Volatile organic compounds content	: Below detectable limits.
(u)	Partition coefficient: n-octanol/water	: Not applicable.
(v)	Auto-ignition temperature	: Not applicable.
(w)	Decomposition temperature	: Not applicable
(x)	Viscosity	: Not applicable.

SECTION 10 – STABILITY AND REACTIVITY

(a)	Reactivity	: Inert solid under normal and anticipated storage, handling and use conditions.
(b)	Chemical stability	: Stable solid under normal and anticipated storage, handling and use conditions.
(c)	Possibility of hazardous reactions	: None known.
(d)	Conditions to avoid	: None known.
(e)	Incompatible materials	: None known.
(f)	Hazardous decomposition products	: None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

(a) Information on toxicological effects:
No acute or chronic health effects known in workers arising from short or long term exposure to this product. This product does not contain toxic substances above known reportable limits.

(b) Symptoms related to physical, chemical and toxicological characteristics: None known.

(c) Delayed and immediate effects and also chronic effects from short and long term exposure: None known.

(d) Numerical measures of toxicity: None known.

SECTION 12 – ECOLOGICAL INFORMATION

(a) Ecotoxicity:
This product is a naturally occurring mineral with no known ecotoxicity.
It is insoluble in water and unlikely to contaminate waterways or food chains.

(b) Persistence and degradability:
Stable and inert product which is not readily biodegradable.

(c) Bioaccumulative potential: This product is not bioaccumulating.

(d) Mobility in soil: Below detectable limits.

(e) Other adverse effects: None known.

SECTION 13 – DISPOSAL CONSIDERATIONS

(a) Disposal methods:
Follow local, state or federal guidelines for disposal of inert solid waste, e.g. for landfill.

(b) Waste disposal considerations:

MATERIAL CONTAMINATED OR REDUCED TO DUST IN USE MAY NEED SPECIAL HANDLING AND DISPOSAL. IT IS THE RESPONSIBILITY OF THE USER TO UNDERTAKE ANY EVALUATION CLASSIFICATION AND DISPOSAL OF MATERIAL AFTER USE.

SECTION 14 – TRANSPORT INFORMATION

a)	UN number	:	None allocated.
b)	UN proper shipping name:	:	Not classified for transportation.
c)	Transport hazard class(es)	:	Not classified under ADG (land transport) code. Not classified under IMDG/IMO (sea transport) code. Not classified under IATA/ICAO (air transport) code.
d)	Packing group	:	Not classified for transportation.
e)	Environmental hazards		Not classified as a marine pollutant. Does not meet the criteria of 2.9.3.3.1 “environmentally hazardous substances (aquatic environment)”.
f)	Special precautions for user	:	None necessary. It is recommended to keep bags closed and dry bulk loads covered to prevent dust generation and moisture incursion.
g)	Hazchem code	:	None allocated.
h)	Harmonised System code	:	251320

SECTION 15 – REGULATORY INFORMATION

(a) Safety, health and environmental regulations/ legislation specific for the substance mixture:

GMA Garnet™ is exempt from the obligation to register under REACH legislation (EC 1907/2006) Annex V 7.

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

No known additional regulations for this product.

SECTION 16 – OTHER INFORMATION

This SDS has been prepared by GMA Garnet Pty Ltd and complies with the Safe Work Australia Code of Practice on the *Preparation of Safety Data Sheets for Hazardous Chemicals 2020* and follows the Globally Harmonised System of Classification and Labelling of Chemicals (the GHS).

As per Safe Work Australia Guidance Note NOHSC 3017, each user should review the information in the specific context of the intended application.

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Revision 21
End of SDS.